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- (71) Applicant (for all designated States except US): VIVENDI TECHNOLOGIES INC. [CA/CA]; 1337, Des Groseilliers, L'Ancienne-Lorette, Quebec G2E 4A3 (CA).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): AREL, François [CA/CA]; 1337, Des Groseilliers, L'Ancienne-Lorette, Quebec G2E 4A3 (CA).

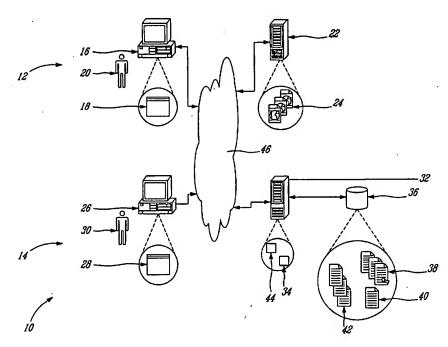
- (74) Agents: DUBUC, J. et al.; Goudreau Gage Dubuc, Stock Exchange Tower, 800 Place Victoria, Suite 3400, P.O. Box 242, Montréal, Quebec H4Z 1E9 (CA).
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#### (54) Title: SYSTEM AND METHOD FOR WEB SITE CONTENT MANAGING



(57) Abstract: A system for managing a content of a web page of a web site hosted by a client web server and accessible to a visitor by a browser, comprising a management interface; and a manager web server connected to said management interface by a network in such a way that the manager web server generates a modifiable web page content from data inputted via the management interface and sends the modifiable web page content to the browser to be assembled with the web page.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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#### TITLE OF THE INVENTION

System and method for web site content managing

#### FIELD OF THE INVENTION

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5 **[0001]** The present invention relates to web sites managing. More specifically, the present invention is concerned with a system and a method for web site content managing.

#### **BACKGROUND OF THE INVENTION**

themselves their web sites, in a quick, simple and cost effective manner. A number of systems and methods for web sites managing are currently available, which prove unsatisfactory for various reasons. For example, they usually require the installation of special software, which may necessitate a change of web host for the web sites in order to be able to use the dedicated managing software. Moreover, an expert intervention is generally necessary at at least one stage of the process of web site managing. As a result, web site managing is time-consuming, troublesome and expensive.

[0003] For example, US Patent application no. 2002/0091725 by Skok describes a system and a method allowing a web site visitor to modify the content of a web page, via a standard browser, wherein edition of the web page requires downloading a software and the modifiable content is hosted on the client web server.

[0004] In their US patents no. 6,012,071 and 6,055,522, Krishna et al present a system and a method allowing to create web pages including

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modifiable content by using a software to be downloaded in the browser of the visitor.

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[0005] Therefore the available systems and methods for managing web site content usually require web site owners to undergo a specific training or to be assisted by experts, which results in increased costs and delays.

[0006] Therefore, there is a need for a system and a method allowing web site content managing without installing any additional software, in an autonomous and efficient way.

#### **OBJECTS OF THE INVENTION**

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10 [0007] An object of the present invention is therefore to provide an improved system and a method for web site content managing.

#### SUMMARY OF THE INVENTION

[0008] More specifically, in accordance with the present invention, there is provided a system for managing a content of a web page of a web site hosted by a client web server and accessible to a visitor by a browser, comprising a management interface and a manager web server connected to said management interface by a network, wherein the manager web server generates a modifiable web page content from data inputted via the management interface and sends the modifiable web page content to the browser to be assembled with the web page.

[0009] There is further provided a method for managing a content of a web page of a web site hosted by a client web server and accessible to a

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visitor by a browser, comprising the steps of providing a management interface, providing a manager web server, connecting the client web server, the management interface and the manager web server by a network, inputting data via the management interface, generating a modifiable content from the data entered via the management interface by the manager web server, sending the modifiable content to the web page on the client web server; and assembling the modifiable content with the web page.

[0010] There is also provided a method for creating and editing a modifiable content in a web page provided by a client web server, comprising the steps of entering data for the modifiable content via a management interface, generating the modifiable content from the data, encoding an address of the modifiable content and an identification of the modifiable content in an identifying code, copying the identifying code in the web page for the browser to locate the modifiable content, and assembling the modifiable content with the web page.

[0011] There is moreover provided a method for editing a modifiable content in a web page provided by a client web server, comprising the steps of requesting a web page in a browser and receiving a modifiable web page content generated by a manager web server from data inputted via a management interface.

[0012] A visitor herein refers to a person surfing from sites to sites with a browser on a network such as the Internet, as opposed to a client who owns web sites visited by the visitor and a manager who is responsible for web pages content. A client/manager refers to an owner of a web site who manages his web pages according to the present invention.

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[0013] Other objects, advantages and features of the present invention will become more apparent upon reading of the following non-restrictive description of embodiments thereof, given by way of example only with reference to the accompanying drawings.

### 5 BRIEF DESCRIPTION OF THE DRAWINGS

[0014] In the appended drawings:

[0015] Figure 1 is a schematic view of a system according to an embodiment of a first aspect of the present invention;

[0016] Figure 2 is a first example of a management interface comprised in the system of Figure 1;

[0017] Figure 3 is a second example of a management interface comprised in the system of Figure 1;

[0018] Figure 4 is a third example of a management interface comprised in the system of Figure 1;

15 **[0019]** Figure 5 is a fourth example of a management interface comprised in the system of Figure 1;

[0020] Figure 6 is a flowchart of a method of use of the system of Figure 1 according to an embodiment of a second aspect of the present invention;

20 [0021] Figure 7 is a flowchart of a method of use of the system of

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Figure 1 according to a further embodiment of a second aspect of the present invention; and

[0022] Figure 8 is an example of a web page comprising a modifiable content generated by the method of Figure 6.

#### 5 DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0023] The present invention generally provides a system and a method allowing a client to manage the content of web pages of the client's web site either in whole or in parts, without requiring programming. The client's web site may be an existing web site or a new web site to be created. In the case of an existing web site, there is no need for modifying a conception thereof.

[0024] More precisely, the system and the method of the present invention allow the client to be the web site manager and autonomously manage the web site content, including create, modify and publish informative content, without resorting to programming, and therefore without delay.

[0025] Turning first to Figure 1 of the appended drawings, a system according to one embodiment of a first aspect of the present invention will now be described.

[0026] The system 10 generally comprises a first subsystem 12 and 20 a second subsystem 14. The first and second subsystems 12 and 14 interact through a network 46, such as the Internet or an Intranet.

[0027] The first subsystem 12 essentially comprises elements of a conventional web site, including a computer 16 provided with a browser 18 for use by a visitor 20, and a client web server 22 hosting web pages 24.

[0028] The client web server 22 may be selected at the time of creation of a new web site or may be a current server hosting an existing web site to which functionalities of the managing system of the present invention are to be added. Interestingly, the present invention is compatible with any client web server 22.

[0029] The second subsystem 14 comprises a computer 26; a manager web server 32 that executes a manager software 34 monitoring a management interface 28 for use by a client/manager 30; a data storing means 36 that stores modifiable web page content 38 created by the client/manager 30 and templates 42 that are used by the client/manager 30 to edit the modifiable web page content 38.

15 [0030] The second subsystem 14 allows managing the modifiable content 38 for the web pages 24 as follows. The client/manager 30 inputs data for the desired modifiable web page content 38 in natural language via the management interface 28, as exemplified in Figure 2. From these data, the manager software 34 generates the modifiable web page content 38, as well as an identifying code 40.

[0031] The modifiable web page content 38 is generated by the manager web server 32 at each visit of the web page 24 by the visitor 20. It may be an HTML code or any other suitable language such as Java or XML, as is believed a person skilled in the art will appreciate.

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[0032] The identifying code 40 may encode a number of parameters, including the address of the manager web server 32 as well as an identification of the modifiable web page content 38. The identification of the modifiable web page content 38 may be a sequence number or an alphanumerical data for example, determined by the manager web server 32. The identifying code 40 is copied in the web pages 24 hosted in the client's web server 22, in which the modifiable web page content is desired (Figure 3) to allow the browser 18 to find the modifiable web page content 38 when the web pages 24 is next visited by a visitor 20.

10 [0033] The identifying code 40 may be a Java code. Since Java programming works, in the same format, on any computer system, the identifying code 40 may run virtually unchanged, on all these systems if it is written in Java.

The templates 42 allow the client to modify the layout of the modifiable web page content 38, which he generates independently of the informative content itself. By using the templates 42, the client may achieve a characteristic layout for his web site while being able to modify the content of the pages very rapidly and efficiently without programming.

[0035] From the foregoing, it should now be apparent that the second subsystem 14 manages and stores the modifiable web page content 38 of a web site otherwise stored in the client server 22 in a conventional way as it is believed to be well known in the art. Therefore, the dynamic content generator embodied by the manager web server 32 is independent from the client web server 22 and both web servers 22 and 32 interact via the network 46 so as to provide a dynamic updated web page content in a flexible and efficient way.

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The client/manager 30 is indeed able to create, modify or delete at will modifiable web page content 38 through the management interface 28 (see Figures 2 and 3). In Figure 4, the management interface 28 allows to select a content to modify. In Figure 5, the management interface 28 allows to modify directly a content, exemplified herein by a description of an automobile.

The modifiable web page content 38 may comprise texts, images or any document that can be inserted in a web site. Obviously, the modifiable web page content 38 may comprise price lists, product lists, etc. The modifiable web page content 38 appear in a format that depends on the template 42 selected by the client/manager 30 for each one of them. Texts for example are typed in or copied in the management interface 28 with ordinary characters like in a word processing operation. Interestingly, no HTML programming is required.

15 [0038] After he has created a modifiable web page content 38, the client/manager 30 is able to import, by copying and pasting for example, the identifying code 40 generated by the manager web server 32 in the original web page 24 at a location where he wants the modifiable web page content 38 to appear thereon.

20 [0039] It is to be noted that the manager software 34 may also be adapted so that the client/manager 30 may enter as a parameter, via the manager interface 28, the location on the web page 24 where he wants the desired modifiable content 38 to appear, by indicating for instance coordinates X and Y. Then, the identifying code 40 may be copied anywhere in the web page 24, independently of the desired location of the modifiable content 38. Interestingly, in that case, the copying of the identifying code 40 on the web

page 24 may be automatically performed by the manager software 34, provided the client/manager 30 enters data, including an ftp address, a user name and a password for example, allowing access to the web page 24 on the client server 22.

In another embodiment of the system 10, it may further be contemplated to copy the modifiable content 38 in the web page 24, so that the browser 18 need not request the modifiable content 38 from the server 32 through the identifying code 40 since the modifiable content 38 would already be on the page 24, while still modifiable through the manager interface 28.

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Furthermore, the subsystem 14 may be provided with a program 44 to be executed on the visitor's computer 16. In this case, the manager web server 32 sends the program 44 to the visitor's computer 16 together with the modifiable web page content 38. The program 44 may be an independent program, or a program such as a "plug-in" or "script" program acting inside the visitor's browser 18. It may be for example a Java bean program executable by the visitor's browser 18 and allowing moving images, interactive calendars etc on the visitor's display. In any case, the modifiable web page content 38 is assembled to the web page 24 in the visitor's browser 18.

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[0042] Additionally, the system 10 allows managing authorizations granted to the visitor 20 and to the client/manager 30, such as a permission to modify or to visit a web site.

[0043] It is to be noted that the client and manager web servers 22 and 32 respectively, as well as the data storing means 36, may be a single server or part of a layout of servers. They may be servers close to one another

and connected by an internal network or servers remote from one another and connected via the Internet for example.



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[0044] When the visitor 20 goes to a web page 50, the web page 50 appears to him as an ordinary web page (see Figure 8). The web page 50 comprises the original content 24 as well as the modifiable web page content 38 created by the client/manager 30 through the system 14, without any action required by the visitor 20.

[0045] Given a conventional web site system 12 including a computer 16 provided with a browser 18 for use by a visitor 20 and a client web server 22 hosting web pages, a method according to a second aspect of the present invention thus comprises providing a managing system 14 including a manager web server 32 and connecting the conventional web site system 12 with the managing system 14 through a network 46 such as the Internet or an Intranet, in such a way that the manager web server 32 generates and manages a dynamic content for the web pages.

[0046] One possible method 100 for use of the system of the present invention will now be detailed in relation to Figure 6.

[0047] First, the browser '18 prompts for a web page requested by the visitor 20 (step 102). The client's web server 22 then sends the requested web page, which contains the identifying code 40 (step 104). Once in the visitor's browser 18, the identifying code 40 allows the browser 18 to send the manager web server 32 a request for the modifiable web page content 38 to be displayed on the requested web page (step 106). The manager web server 32 then generates the modifiable web page content 38 (Step 108) and sends it to the visitor's browser 18 (step 110). The visitor's browser 18 can then display

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the modifiable web page content 38 in a desired location of the web page (step 112).

[0048] Alternatively, in step 106, the manager web server 32 may additionally send the program 44 with the modifiable web page content 38.

5 **[0049]** Figure 7 is a flowchart of another possible method 200 for use of the system of the present invention.

[0050] As described hereinabove in relation to the method 100, a first step 202 comprises requesting a web page 24. In a second step 204, the requested web page 24, is sent to the user's browser 18 with the modifiable web page content 38 already therein, for display by the browser 18 (step 206); the modifiable web page content 38 is still modifiable by the web server 32 through the manager interface 28.

[0051] Turning now to Figure 8 of the appended drawings, an example of applications of the present invention will be described.

15 **[0052]** When the visitor 20 goes to a web page 50 such as www.automobile.com for example, the original part 24 of the page as provided by the web site owner appears, comprising buttons 54 and decorative features, and headlines 52 of the browser 18, as illustrated in Figure 8.

[0053] When the identifying code 40 copied in the original web page 24 requests the manager web server 32 for a modifiable web page content 38, the manager web server 32 generates the modifiable web page content 38 and sends it to the visitor's browser 18 for display at a desired location of the

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original web page 24, as described hereinabove. This sequence of events takes place in fractions of seconds and is therefore non-perceptible to the visitor 20.

Therefore, the present invention provides a method for editing a content of a web page provided by a client web server, comprising the steps of sending a code identifying a manager web server generator of a modifiable web page content into the web page and assembling the modifiable web page content and the web page in the browser. Alternatively, the present invention provides a method for editing a content of a web page provided by a client web server, comprising the step of copying the modifiable web page content into the web page in the client web server.

An example of an identifying code 40 to be copied in the original web page 24 is illustrated in Figure 3. It is essentially a short code that, on the one hand, indicates the visitor's browser 18 where to go and find a desired modifiable web page content 38 and, on the other hand, indicates the manager web server 32 which modifiable web page content 38 is desired. Therefore, typically the identifying code 40 indicates the address of the manager web server 32 and identifies the modifiable web page content 38. The visitor's browser 18 displays the modifiable web page content 38 received from the manager web server 32 at the desired location on the web page 24

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[0056] From the foregoing, people in the art will appreciate that the system and method of the present invention allow a web site owner a complete autonomy, without installing any software modifying the hardware, i.e., without disbursements for buying external elements. The system and method of the present invention allow the creation of a web site as well as the managing of any informative portion thereof, or of the web site as a whole, including

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modifying and distributing data, with a simple browser.

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[0057] Although the present invention has been described hereinabove by way of embodiments thereof, it can be modified, without departing from the spirit and nature of the subject invention as defined in the appended claims.

### WHAT IS CLAIMED IS:

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- 1. A system for managing a content of a web page of a web site hosted by a client web server and accessible to a visitor by a browser, comprising:
  - a management interface; and
- a manager web server connected to said management interface by a network;
- wherein said manager web server generates a modifiable web

  10 page content from data inputted via said management interface and sends said

  modifiable web page content to the browser to be assembled with the web

  page.
- The system according to claim 1, wherein the data of a
   modifiable web page content are inputted via the management interface in a natural language.
- 3. The system according to any one of claim 1 or claim 2, further comprising a data storing means to store the modifiable web page 20 content.
  - 4. The system according to any one of claims 1 to 3, further comprising templates to assist in creating the modifiable web page content.
- 5. The system according to any one of claims 1 to 4, wherein said manager web server sends a program together with the modifiable web

page content to the visitor's browser, said program acting inside the visitor's browser.

- 6. The system according to claim 5, wherein said program is selected in the group comprising an independent program, a "plug-in" program, and a "script" program.
  - 7. The system according to claim 5, wherein said program is a Java bean program.
- 10 8. The system according to any one of claims 1 to 4, wherein the modifiable content generated and managed by the manager web server is copied in the web page on the client web server.
- 9. The system according to claim 1, wherein said manager web server further generates an identifying code encoding parameters including an address thereof and an identification of the modifiable web page content.
- 10. The system according to claim 9, wherein said identifying20 code is copied in the web page hosted in the client web server in which the modifiable web page content is desired.
- 11. The system according to any one of claims 9 or 10, wherein said identifying code is selected in the group comprising a Java code,
   25 a HTML code and a XML code.

- 12. The system according to any one of claims 9 to 11, wherein said identifying code allows the visitor's browser to request the modifiable content to the manager web server for assembly with the web page.
- 5 13. The system according to any one of claims 1 to 12, wherein the modifiable content is an html code.
  - 14. The system according to any one of claims 1 to 13 wherein said network is selected in the group comprising the Internet and an Intranet.

15. The system according to any one of claims 1 to 14, wherein said client web server and said manager web server are a single server.

- 16. The system according to any one of claims 1 to 14,15 wherein said client web server and said manager web server form part of a layout of servers.
  - 17. A method for managing a content of a web page of a web site hosted by a client web server and accessible to a visitor by a browser, comprising the steps of:
- 20 providing a management interface;

providing a manager web server;

connecting the client web server, the management interface and the manager web server by a network;

inputting data via the management interface;

generating a modifiable content from the data entered via the management interface by the manager web server;

sending the modifiable content to the web page on the client web server; and

assembling the modifiable content with the web page.

- 5 18. The method according to claim 17, wherein said step of providing a manager web server comprises using the client web server as the manager web server.
- 19. The method according to claim 17, wherein said step of10 providing a manager web server comprises forming a layout of servers including the client web server.
  - 20. The method according to claim 17, wherein said step of connecting the client web server, the management interface and the manager web server by a network comprises selecting a network in the group comprising the Internet and an Intranet.

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- 21. The method according to claim 17, wherein said step of inputting data via the management interface comprises imputing data in a 20 natural language.
  - 22. A method for creating and editing a modifiable content in a web page provided by a client web server, comprising the steps of:
- entering data for the modifiable content via a management 25 interface;

generating the modifiable content from the data;

encoding an address of the modifiable content and an identification of the modifiable content in an identifying code;

copying the identifying code in the web page for the browser to locate the modifiable content; and

assembling the modifiable content with the web page.

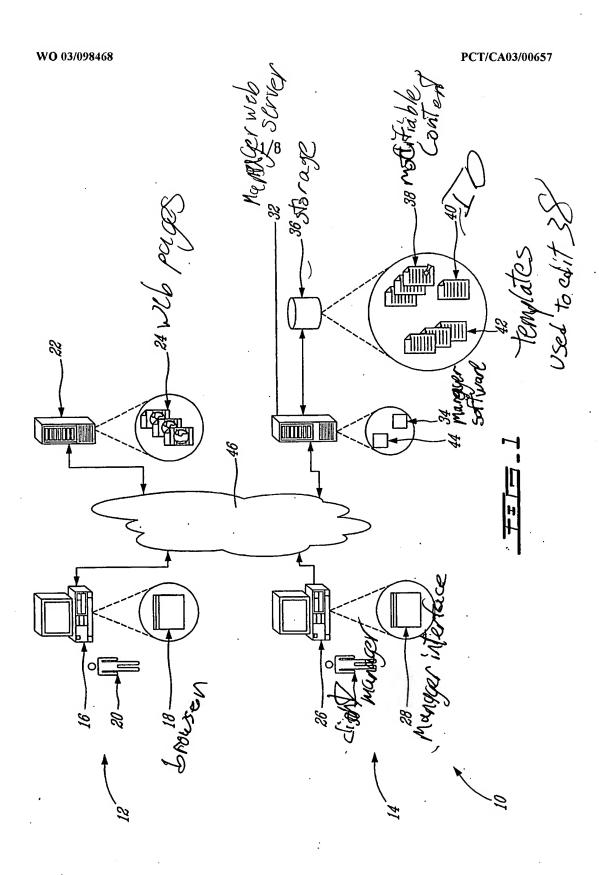
- 5 23. The method according to claim 22, wherein said step of entering data for the modifiable content via a management interface comprises inputting data in a natural language.
- 24. The method according to claim 22, wherein said step of generating a code from the data for the modifiable content is performed by a manager web server connected to the management interface and to the client web server by a network.
- 25. The method according to claim 24, wherein said step of encoding an address of the modifiable content and an identification of the modifiable content in an identifying code comprises encoding an address of the manager web server and an identification of the modifiable content.
- 26. The method according to claim 22, wherein said step of copying the identifying code in the web page is performed manually.
  - 27. The method according to claim 22, wherein said step of copying the identifying code in the web page is performed automatically.
- 25 28. A method for editing a modifiable content in a web page provided by a client web server, comprising the steps of:

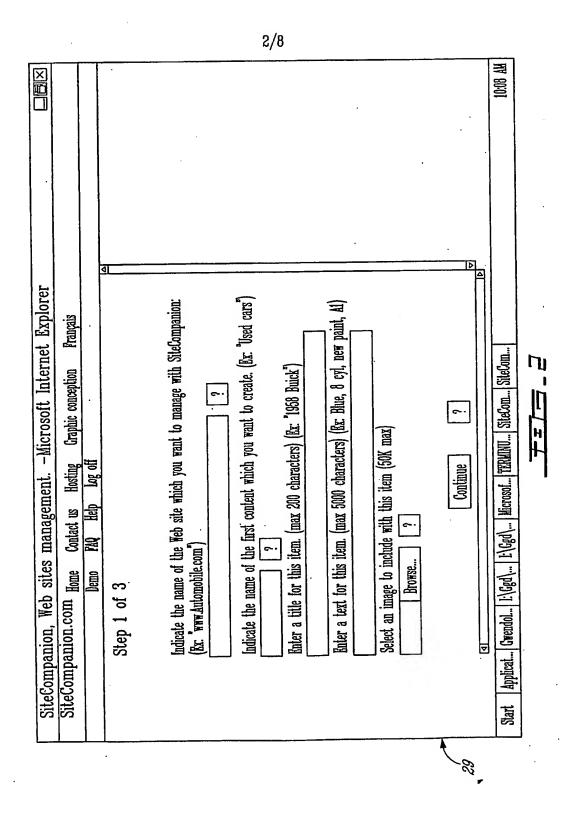
requesting a web page in a browser; and

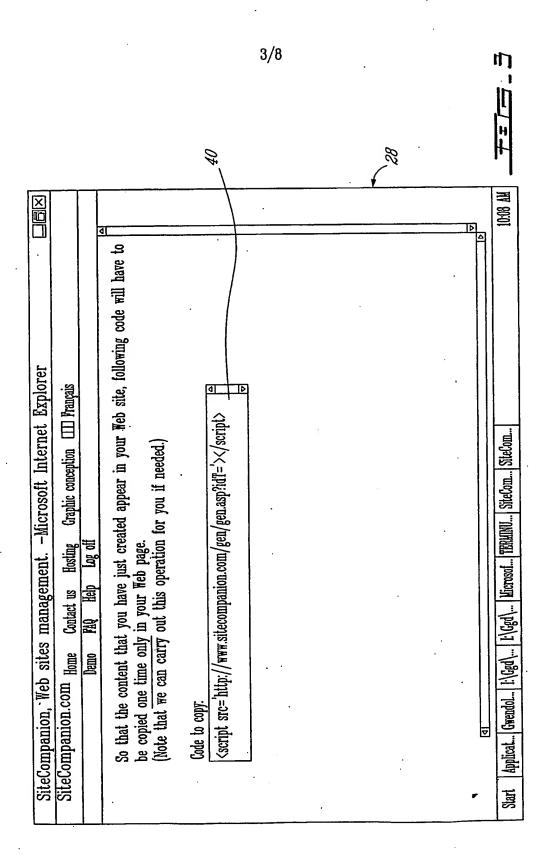
receiving a modifiable web page content generated by a manager web server from data inputted via a management interface.

- 29. The method according to claim 28, wherein said step of receiving a modifiable web page content generated by a manager web server from data inputted via a management interface comprises the steps of:
- generating the modifiable content from the data;
  encoding an address of the modifiable content and an identification of the modifiable content in an identifying code;
  - copying the identifying code in the web page for the browser to locate the modifiable content; and
- 10 assembling the modifiable web page content and the web page in the browser.
- 30. The method according to claim 28, wherein said step of receiving a modifiable web page content generated by a manager web server from data inputted via a management interface comprises the steps of:

  generating the modifiable content from the data; and receiving the modifiable content together with the requested web page.

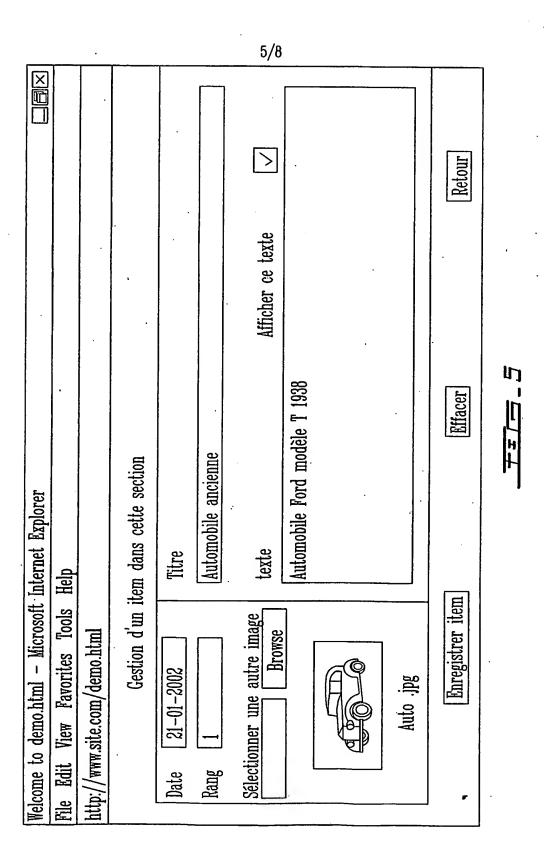




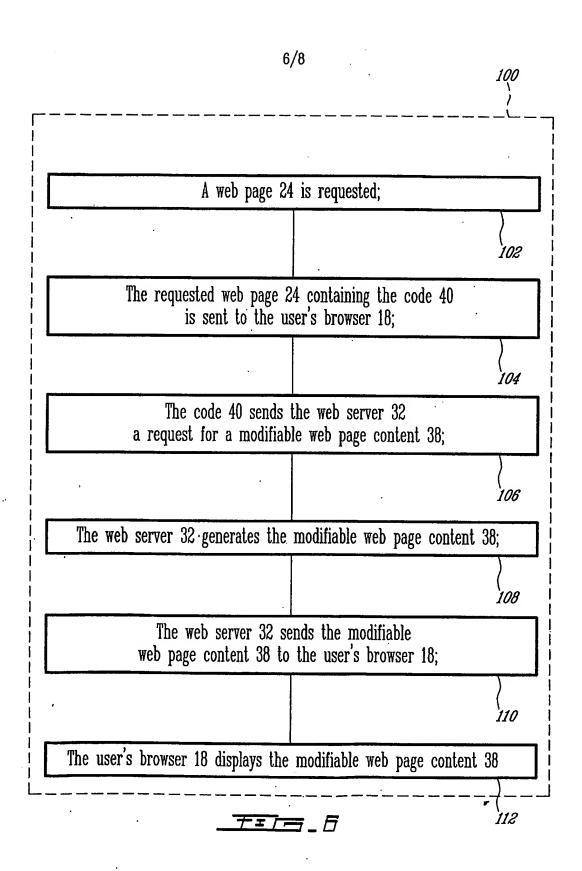


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